

# Unlocking Autonomy at Human Scale

## Hexagon Live 2025

### Key Takeaways

Hexagon AB celebrated their 25 years of measurement-leadership journey at Hexagon Live 2025 in Las Vegas, NV.

In 2024, Hexagon announced they were exploring spinning off part of their business. At Hexagon Live, they announced its name, Octave, a company starting with about 7,500 employees and €1.5B in revenues.

The company introduced AEON, a humanoid autonomous robot designed to work alongside humans, that has great promise in industrial applications.

Hexagon Nexus, their open, cloud-native “Digital Industrial Platform” continues to expand and demonstrate measurable benefits.

CIMdata had the pleasure of attending Hexagon Live 2025, held at the Fontainebleu in Las Vegas, NV on 16-19 June 2025.<sup>1</sup>

Mr. Ola Rollén, Hexagon’s Chairman, kicked off the opening keynote, stating that Hexagon started their measurement-leadership journey 25 years before with their acquisition of Brown & Sharpe’s metrology business.<sup>2</sup> Many acquisitions and innovations followed. All leaps for mankind involve measurement technology, with Mr. Rollén citing the 1969 moon landing as an example. He proceeded to talk about all kinds of measurements created and used over the centuries—cubits, furlongs, and the mile—to make an important point, often attributed to Lord Kelvin: “to measure is to know.” The full Kelvin quote makes another important point: measurement advances knowledge to “the stage of science.”

Hexagon was a leader in commercializing point clouds, now used to create geometry from scanning brownfield sites, among other applications. Mr. Rollén went on to relate the story of Mr. Andrew Tallon, an architectural historian whose detailed laser scanning of Notre Dame cathedral was critical to its restoration.<sup>3</sup> His tool of choice, a Leica laser scanner, from one key Hexagon acquisition.

Then Mr. Rollén turned to a bigger topic, the announced spinoff of Hexagon’s Asset Lifecycle Intelligence (ALI) business unit. Hexagon’s board began exploring spinning off ALI in 2024.<sup>4</sup> At Hexagon Live, Mr.

<sup>1</sup> Research for this commentary was partially supported by Hexagon

<sup>2</sup> <https://hexagon.com/company/newsroom/press-releases/2000/hexagon-acquires-brown-sharpe>

<sup>3</sup> <https://www.vassar.edu/stories/2019/190417-notre-dame-andrew-tallon.html>, <https://shop.leica-geosystems.com/leica-blk/blk360/blog/precision-laser-scans-notre-dame-cathedral-can-help-preserve-restore-and-rebuild>

<sup>4</sup> <https://hexagon.com/company/newsroom/press-releases/2024/hexagon-evaluating-potential-separation-of-its-asset-lifecycle-intelligence-business>

Rollén revealed the name of the new company: Octave.<sup>5</sup> It will include Hexagon's existing Asset Lifecycle Intelligence and Safety, Infrastructure and Geospatial divisions, and will also include ETQ (from the Manufacturing Intelligence division) and BricSYS (from the Geosystems division). CIMdata includes Hexagon in our global market research, and about 70% of our total PLM revenue estimate for Hexagon will now be in Octave. The company expects the separation to be completed in the first half of 2026.

During the event, Mr. Rollén and Mr. Mattias Stenberg, Octave's CEO, assured the attendees that despite the business breakup, the collaboration between the businesses will continue as before. Why are they creating Octave? Mr. Mattias Stenberg, a long-time Hexagon executive tapped as the CEO, said Octave would accelerate growth and unlock greater value for both companies, taking it "up and octave" he joked. He continued that Octave will have the flexibility to focus on its own operating strategy and establish a platform for mergers and acquisitions (M&A) to expand the company. The new entity will have about 7,500 employees with €1.5B revenue, with a high percentage of recurring revenue. Their focus? To design, build, and operate the world's most mission-critical assets including electricity generation and the electric grid, transport hubs, data and control centers, and advanced production facilities. Mr. Stenberg claimed Octave was "truly born digital," a software-first company, cloud-native, with intelligence built-in, and solutions built for scale that is made for "what must not fail."

Mr. Rollén continued and cited some great customer examples. One project was likely impossible without Hexagon technology, as Mr. Rollén stated: the longest and deepest subsea tunnel planned by Norway, a long, narrow country whose mountains, fjords, and glaciers make ground transportation challenging. This 27 km tunnel 400 meters under the surface used 12-18 laser scans per day to keep project tunnels aligned within 3-5 cm. When completed, the tunnel will cut travel time in parts of Norway by half. This project surely is a triumph of man and technology over nature.

The main stage focus then turned to Hexagon's robotics efforts, now a company division announced in March 2025. Mr. Arnaud Robert, President of the division, noted that automation has come a long way in the last 10 years. Stationary robots, a factory mainstay, were joined by autonomous mobile robots (AMRs) using sensors, mapping technologies, and artificial intelligence (AI) to navigate and move around in dynamic environments. Hexagon's focus is autonomous robots, in part due to demographics. Human populations in many regions will start declining over the next 75 years. Autonomous robots can take many jobs, and create a lot more, building and supporting this new robotic workforce. Why humanoid? The "specification for the world" was the human form. Interior spaces were designed for human navigation; complex devices were designed to be viewed and manipulated by humans. Mr. Robert claimed that once you have sensors, you have awareness, and the world can benefit from humanoids to complete tedious jobs in many industries. As Mr. Robert stated, this form factor can integrate with our infrastructure. But there is a more practical reason. Fixed robots had to be rigorously programmed. What better way to "program" a robot than by enabling it to mimic human behavior? He stated that Hexagon created the robotics division, now 3,000 people strong, to capture the promise of autonomy to build versatile robots. AEON, their first versatile robot, joined Mr. Robert on the stage. Unlike many humanoid robots, AEON uses wheels, not feet. Why wheels? They started with feet, and also tried belts, both seen in countless robot demos in recent years. The team determined that wheels were the most efficient. AEON is designed to work alongside human teams, using its human-like hands. Mr. Robert cited that recent advances in actuators and human-like hands are critical to AEON's capabilities. Also critical are their key robotics partners, Microsoft, NVIDIA, and Maxon. Inside AEON are 12 cameras, 22 different sensors, two batteries, and three computers (one general purposes, and two focused on AI working with edge computing).

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<sup>5</sup> <https://hexagon.com/company/newsroom/press-releases/2025/octave-unveiledhexagon-reveals-name-for-potential-2026-company-spin-off>

A later session offered a detailed update on Hexagon Nexus, their “Digital Industrial Platform,” an open, cloud-native system of engagement. Mr. Stephen Graham, EVP and GM for Nexus, spoke of how Nexus meets customers “where they are,” supports their legacy tools, and does not require them to adopt everything at once. CIMdata was part of the Nexus launch event in 2023 and applauded their open approach as being critical to enabling heterogenous digital threads.<sup>6</sup>

Paragon Medical, a supplier of complex, multi-use medical devices, was an early adopter of Nexus-based solutions and highlighted their significant benefits to date. In particular, Paragon Medical uses ProPlanAI, a tool that leverages institutional knowledge to dramatically improve productivity in programming coordinate measuring machines (CMMs), devices crucial to quality in many industries, including medical devices.<sup>7</sup> According to Mr. Jeffrey Livingston, Senior Quality Manager at Paragon Medical, his company struggled to “grow” CMM programmers. They would start a program with 10 people, and 3 years later only had 2 skilled graduates to show for it. Using Hexagon’s offering he could develop a standardized measurement strategy that improved programmer development and career pathing, while also improving their management of operating changes. With Nexus Asset Manager, they can view assets on their shop floor, and sites around the world, it is their “flight data recorder” that provides live and historical data to greatly enhance operations.

The event included many other sessions, including an interesting panel of technology leaders from Formula 1 (F1), NASCAR, and endurance racing who rely on Hexagon’s portfolio to meet the rigorous demands of their sports. According to Ms. Alba Cloon, Director of Technical Partnerships for Hendrick Motorsports, they have relied on Hexagon products since 2002 and today you will see Hexagon tools “everywhere in our shop.” For those not at the conference, the new movie “F1” highlights just how critical these technologies are to racing success. Those pushing the envelope in all fields of human endeavor often need the most advanced tools and this session brought home that message.

Collectively, these sessions illustrated how critical companies like Hexagon are in our lives and to our businesses in a complex, ever changing world. Measurement is key to scientific progress and deep knowledge, and Hexagon has been at the forefront of this need for 25 years. Measurement is their core business and, in music, measures are how you organize tempo within a time signature. This offers a nice symmetry in choosing Octave as their spinoff name, and how both entities hope the move helps improve their innovation tempo and success. AEON is potentially a game-changer for the company, and a growth driver going forward. More are certainly coming and CIMdata is pleased to have a ringside seat at the show.

## About CIMdata

CIMdata, a global strategic management consulting firm, provides services designed to maximize an enterprise's ability to design, deliver, and support innovative products and services. For more than forty years, CIMdata has provided industrial organizations, providers of digital technologies and services, and investment firms with world-class insight, expertise, and best-practice methods on a broad set of product lifecycle management (PLM) topics and the digital transformation they enable. CIMdata also offers research, subscription services, publications, and education through certificate programs and international conferences. To learn more, visit [www.CIMdata.com](http://www.CIMdata.com) or email [info@CIMdata.com](mailto:info@CIMdata.com).

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<sup>6</sup> <https://hexagon.com/company/newsroom/press-releases/2023/hexagons-digital-reality-platform-nexus-is-now-available-to-manufacturers-putting-an-end-to-silos-and-enabling-faster-innovation>

<sup>7</sup> Earlier in 2025, CIMdata wrote a commentary about Nexus and ProPlanAI: <https://hexagon.com/company/newsroom/press-releases/2023/hexagons-digital-reality-platform-nexus-is-now-available-to-manufacturers-putting-an-end-to-silos-and-enabling-faster-innovation>